

Appl. No. 10/553019

Reply to final Office Action dated 5/20/2009

REMARKS

Favorable reconsideration and reexamination of this application are respectfully requested.

Claims 11-18 and 20-27 have been revised editorially.

In claims 11 and 20, the term "poly(telephthaloyl-2,2,4-trimethyl hexamethylene diamine)" has been revised to "poly(2,2,4-trimethyl hexamethylene terephthalamide)."

Claims 13 and 22 have been revised to correct a typographical error. In claims 13 and 22, the term "heptnoic" has been corrected to "heptanoic."

Claims 17 and 26 have been revised to be one sentence.

Claims 29-34 are new and are supported by page 5, lines 18-20 in the Specification.

There is no new matter. Claims 11-34 are pending.

In the Specification

Typographical errors have been corrected in the Specification. The term "heptnoic" has been corrected to "heptanoic" in the Specification. The term "poly(telephthaloyl-2,2,4-trimethyl hexamethylene diamine)" has been revised to "poly(2,2,4-trimethyl hexamethylene terephthalamide)" in the Specification. There is no new matter.

Claim Rejections – 35 USC § 112

Claims 11-28 were rejected under 35 USC 112, second paragraph, as being indefinite.

In claims 11 and 20, the rejection stated that it is unclear as to whether the matrix nylon and the long-chained nylon can be the same material. Claims 11 and 20 have been revised. The matrix nylon and the long-chained nylon in claims 11 and 20 are distinguishable from one another. Applicants do not concede the correctness of the rejection.

In claims 11 and 20, the rejection stated that "poly(telephthaloyl-2,2,4-trimethyl hexamethylene diamine)" and "poly(3-t-butyl-hexanedioyl heptamethylene-diamine)" are not art-recognized nylons. Applicants do not concede the correctness of the rejection.

One skilled in the art would recognize the term "poly(telephthaloyl-2,2,4-trimethyl hexamethylene diamine)" based on the structural names used in the term. For clarification purpose, the term "poly(telephthaloyl-2,2,4-trimethyl hexamethylene diamine)" has been revised

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to "poly(2,2,4-trimethyl hexamethylene terephthalamide)." The revised term is readily recognized to those skilled in the art.

Further, those skilled in the art would understand "poly(3-t-butyl-hexanedioyl heptamethylene-diamine)" to be a nylon based on the structural names used in the term. For example, one skilled in the art would readily understand the structure of "3-t-butyl-hexanedioyl" and "heptamethylene-diamine." One skilled in the art would also understand "poly" and the the description that the term is a nylon. Thus, one skilled in the art would understand the definite structure of the nylon "poly(3-t-butyl-hexanedioyl heptamethylene-diamine)."

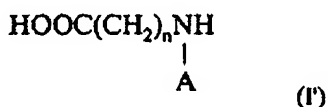
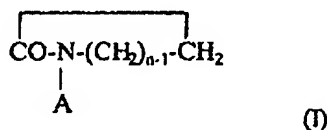
In claims 15 and 24, the rejection stated that it was unclear as to whether or not the polymerization is limited to the recited process. Claims 15 and 24 have been revised to clarify the process. New claims 29-34 have been added to track with the revised claims 15 and 24. Applicants do not concede the correctness of the rejection.

For at least the above reasons, claims 11-28 are not indefinite. Applicants respectfully request this rejection be withdrawn.

Claim Rejections – 35 USC § 103

Claims 11-15, 19-24, and 28 were rejected under 35 USC 103(a) as being unpatentable over Horn et al. (US 4714718). Applicants do not concede the correctness of the rejection.

Regarding claim 11, the rejection stated that Horn et al. teaches a cyclic lactam as defined when $n=5$. Even if Horn et al. does teach polymerization of a caprolactam ($n=5$), which Applicants do not concede, Horn et al. does not teach polymerization of a N-alkyl-lactams. In contrast, claims 11 and 20 require a cyclic lactam according to Formula (I) wherein A is an alkyl group that includes 1-8 carbon(s).



Thus, claim 11 is patentable over Horn et al. Claims 12-15 and 19 are patentable over Horn et al. for at least the same reasons as claim 11 from which they depend.

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Further, regarding claim 13, Horn et al. fails to teach a polymerization of a cyclic lactam monomer is selected from the group consisting of butanolactam, pentanolactam, hexanolactam, heptanolactam, octanolactam, nonanolactam, decanolactam, undecanolactam, dodecanolactam, N-methyl hexanolactam, N-n-octyl nonanolactam, and N-t-butyl dodecanolactam.

Claim 20-24 and 28 are also patentable over Horn et al. for at least the same reasons stated above in regard to claim 11.

Favorable reconsideration and withdrawal of the rejection are respectfully requested.

In view of the above amendments and remarks, Applicants respectfully request favorable reconsideration of this application in the form of a Notice of Allowance. If any questions arise regarding this communication, the Examiner is invited to contact Applicants' representative listed below.

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Respectfully submitted,

HAMRE, SCHUMANN, MUELLER &
LARSON, P.C.
P.O. Box 2902
Minneapolis, MN 55402-0902
(612) 455-3800

By: *Curtis B. Hamre*
Curtis B. Hamre
Reg. No. 29,165
CBH/ajk/mz